



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
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August 4, 2005

Kenneth Myers
Federal Highway Administration
Virginia Division
P.O. Box 10249
400 N. 8th Street Room 705
Richmond, Virginia 23240

Subject: Route 460 Location Study, Draft Environmental Impact Statement

Dear Mr. Myers:

In accordance with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) offers the following comments regarding the Route 460 Location Study Draft Environmental Impact Statement (DEIS). Route 460 is a proposed Virginia Department of Transportation (VDOT) highway facility that would connect the City of Suffolk and I-295 in Prince George County, Virginia. The study area extends approximately 55 miles and includes the counties of Prince George, Sussex, Surry, Southampton, Isle of Wight and the City of Suffolk.

The project is located in the watersheds of the Nottoway, Nansemond and Blackwater Rivers, and is mostly located in the wetland rich Blackwater River watershed. The study area is predominately rural and is approximately 66% forested (including forested wetlands) and 31% agricultural. The stated purpose of the Rt. 460 study is to address current highway safety issues, increasing truck traffic and to provide for increased hurricane evacuation capacity.

Three Candidate Build Alternatives (CBA) were retained after a screening process that examined five build alternatives and a mass transit alternative. CBA 1 is on a new alignment and is located south of the current Rt. 460, CBA 2 involves the upgrading of the existing Rt. 460 with by-passes around five communities along the existing Rt. 460 and CBA 3 is on a new alignment located north of the existing Rt. 460. In addition to the CBAs a Transportation Systems Management Alternative (TSM) and the no-build alternatives were retained for further study. The TSM Alternative includes low cost roadway improvements intended to improve the efficiency and safety of the existing highway. EPA notes that one of the preliminary alternatives, Alternative E, was eliminated in part because it is not consistent with local land use and may have contributed to a higher level of indirect effects than any of the other alternatives studied. EPA supported the elimination of this alternative from further consideration during preliminary reviews with VDOT and the Federal Highway Administration (FHWA).

Major Issues:

Rt. 460 may result in the potential for disproportionate impacts upon minority and low-income communities in the study area. The percentage of minority populations in the study area significantly exceeds the state average of 28% minority. Please note that the percentages of minority displacements for CBA1, CBA2, and CBA3 in both the Planning and Design Corridor scenarios equal or exceed the state average of minority population. For example, the minority displacements exceed 50% for CBA2 under the Planning Corridor scenario. According to the DEIS, this percentage of displacements is significantly higher than the percent of minority residents that lives in the study area (44%). Several recommendations on how to clarify and more deeply explore this issue in the FEIS are included in our attached supporting comments.

Based on a design corridor width of 230 feet for CBAs 1 and 3, and a design corridor width of 140 feet for CBA 2, Rt. 460 will impact between 110 and 138 acres of wetlands, 599 and 1,140 acres of forestland, impact between 833 and 1,146 acres of prime farmland, 24,000 to 37,000 linear feet of stream and will result in between 32 and 66 residential displacements. CBA 2 impacts the least amount of aquatic resources at 110 acres of wetlands, and 24,000 lf of stream and given it appears to meet the purpose and need, it may be the least environmentally damaging practicable alternative. CBA 2 also impacts the least amount of forest (599 acres) and prime farmland (833 acres). However, CBA 2 will impact the most business and will have the second highest residential displacements including the potential for a disproportionate impact to low income and minority populations.

EPA would like to note that although the wetland impact numbers are large, this is a long highway project and the wetland impacts per mile are far less than the recently reviewed Southeastern Expressway and Greenbelt located in Virginia Beach and Chesapeake, Virginia. Furthermore EPA anticipates this number will drop further with additional avoidance measures.

The DEIS presents a sufficient level of detail and planning to identify potential compensatory mitigation sites for the wetland impacts. A site selection process identified approximately 2900 acres of potential mitigation as compared to the approximately 200 to 250 acre mitigation requirement based on standard replacement ratios. EPA does recommend that due to the large upland forest impacts and fragmentation of wetland ecosystems that will result, particularly if CBA 1 or CBA 3 is built, that the overall mitigation needed to compensate for the impacts of Rt. 460 may be larger than the standard 2 to 1 replacement ratio for forested wetland impacts.

In addition to wetland mitigation, the DEIS identified potential stream impact mitigation opportunities and sites. Relatively large portions of the Blackwater River watershed and a number of surface waters within the study area are classified as impaired on the basis of fecal coliform, sediments, and low dissolved oxygen. These impairments are related to agricultural runoff, concentrated livestock operations, and non-highway sanitation-related issues (such as failing septic systems). In addition to having fewer crossings and encroachments on waters of the U.S., CBA 2 may provide a beneficial indirect impact along the existing Route 460 corridor by affording the opportunity to improve any deficient stormwater management facilities and

reduce pollutant loading in streams currently crossed by Route 460. An opportunity for addressing this issue through stream restoration, particularly riparian buffer establishment, may be possible if Rt. 460 is constructed.

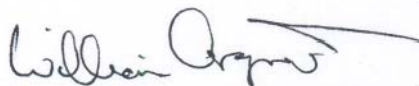
The DEIS includes a number of proposed bridges over stream and wetland systems. They range from 480 feet to 4,160 feet in length. According to the DEIS these lengths were selected to provide the minimum hydraulic opening required and in some cases were extended to reduce wetland impacts. EPA will comment on the level of bridging during the Section 404 Clean Water Act review process and will likely suggest increased bridging as a method to further reduce impacts.

EPA is concerned that the indirect impacts to business along the existing Rt. 460 corridor may be underestimated by the DEIS. The DEIS presents a discussion of this issue but not a great deal of data. The DEIS does state that the towns of Windsor, Waverly and Wakefield would be potentially less impacted by a by-pass than some of the smaller towns based on the idea that they are larger and more self-sufficient. The FEIS should explore this issue in more detail including an analysis of similar roadway projects in Virginia and elsewhere.

In summary, EPA believes CBA 2 is the least damaging to aquatic and other natural resources and may be the least environmentally damaging practicable alternative that addresses all the elements of the purpose and need. The DEIS appears to have identified sufficient - mitigation acreage to for the direct impacts and EPA looks forward to working with VDOT on additional avoidance (bridging and alignment shifts) and mitigation for the indirect, forestland and wetland fragmentation impacts. However, EPA believes the potential Environmental Justice issues associated with the CBAs should be more fully explained in the FEIS along with a more detailed evaluation of the economic impact of bypasses to existing business, including minority owned businesses. Consequently EPA rates the Rt. 460 project with Environmental Concerns (EC) and the document as Insufficient Information (2). A copy of our rating system is attached.

If you have any questions or comments regarding our letter please feel free to contact me at 215-814-3367 or Mr. Peter Stokely at 703-648-4292.

Sincerely,

A handwritten signature in dark ink, appearing to read 'William Arguto', with a long horizontal flourish extending to the right.

William Arguto, NEPA Team
Leader Environmental Programs
Branch

Enclosures:

Attachment:

EPA Additional Comments Rt. 460 Location Study DEIS August 2005

Purpose and Need

Level of Service (LOS) appears not to be a problem that needs addressing from this proposal. The No-build alternative improves LOS to the same level as the build alternatives. Since LOS is not an issue, to the extent LOS is part of P&N, it should be removed.

The DEIS indicates that the TSM alternative will address at least one of the purposes of the Rt. 460 study, safety. Given that this critical need can be satisfied with the low cost and lower impact TSM improvements, EPA recommends this alternative may be a worthwhile solution when balancing safety, fiscal, environmental and human costs.

Environmental Consequences

Fig 4.1.1 is difficult to read due to the lack of color and similarity between the symbols for agriculture, forestland and wetlands.

The wetland mitigation section should include the nine screening criteria for mitigation site selection that are found in the Natural Resources Technical Document.

Forestland Impacts:

The impact to forestland for each of the CBAs ranges from approximately 600 to 1140 acres, based on the design corridor. This is a significant impact and is larger than the impact to wetlands. EPA believes this impact should be mitigated as part of the overall compensation package. The FEIS should contain a plan for forestland impact mitigation including mitigation for migratory birds relying on terrestrial habitat.

Fragmentation of wetland systems and wildlife corridors:

In addition to the direct impacts to wetlands, each of the CBAs to one degree or another will fragment existing wetland ecosystems and wildlife corridors. The greatest impact will come from CBAs 1 and 3 since they are on new alignment and will result in a new crossing of these resources. CBA 3 will have the greatest impact because it crosses more established wildlife corridors than the other alternatives.

Fragmentation of intact ecosystems will result in the direct loss of habitat in the roadway corridor and have negative effects to wildlife and neo-tropical migratory birds. In addition species diversity will be impacted by fragmentation in the corridor and beyond. Roadway noise, day lighting of interior wooded areas and the introduction of edge and exotic plant and animal species is likely to further degrade the quality of the wetlands crossed by Rt. 460.

Considering the wetland fragmentation impacts, EPA recommends that the wetland mitigation package include sites and acreages that would address this issue. In addition, bridging that is designed to allow wildlife passage, should be included in the design of any of the CBAs if selected. Also, from review of the wetland mapping in respect to the CBAs, it appears that additional avoidance of wetland resources may be possible. The best examples of this can be found along CBA 2 east of Windsor and north of Ivor.

Stream Impacts:

The stream impacts (in terms of the crossing locations) are fairly evenly distributed along the length of each of the CBAs, yet the potential stream restoration sites are mainly located in the eastern end of the study area. In addition, most of impaired stream segments identified in the DEIS are located in the western portion of the study area. EPA recommends that additional stream restoration sites be identified in the western portion of the study area, particularly those that may provide benefit to impaired stream segments.

Indirect Effects:

Each of the CBAs may lead to indirect impacts to terrestrial and aquatic ecosystems. This will result from the new interchanges that are located in rural areas some distance away from the small towns served by the existing Rt. 460. The DEIS states that CBA 3 will have the most new commercial development areas (interchanges), with up to 380 acres of additional land use impacts possible at the interchange locations. EPA concurs with this assessment and as a result believes that CBA 3 may be the most damaging to natural resources overall. While EPA recognizes the rural nature of the study area may reduce the potential indirect impacts from Rt. 460, EPA recommends that the predicted impacts (50-380 acres depending on the alternative selected) be offset as part of the mitigation package.

Air Quality Comments

The proposed project has been included in the latest regional conformity analysis for the 8-hour ozone standard, and has demonstrated conformity for the entire non-attainment area. Therefore there are no current issues related to conformity. It should be noted that the conformity analysis for the region, including this project, will have to be re-evaluated once the final project location is selected. This re-evaluation should include the final length, number of lanes, intersections and Vehicle Miles Traveled projections for the selected project alignment. This may be done during their regular conformity process cycle.

The CO hot spot analysis methodology and approach used is acceptable for this type of location study, with appropriate assumptions used for the modeling. However, after a final alternative is selected, a more detailed analysis for potential CO hot spots must be done. This more detailed analysis, should examine specific locations with potential receptors, i.e. residential structures, schools, local businesses, or certain geographical conditions that may exist. Specific locations for this analysis may include depressed or low lying areas which abut the new highway

(at intersections and interchanges) or where potential high volumes of traffic may occur, or where congested traffic flow may occur during certain times of the day.

Environmental Justice Comments

The Draft Environmental Impact Statement and the associated Socioeconomic Technical Report for the Route 460 Location Study provides a great deal of information that is useful to the reviewer. It should be noted that some of the information provided is a bit confusing and lacks clarity. Table 1- 4 in the Technical Report, for example, should contain a column that totals the numbers of minorities in each of the counties. There needs to be greater consistency in the manner in which the various jurisdictions are listed in the tables contained in this document. It is understood that the unincorporated areas of Disputanta, Zuni, and the Kings Fork community in Suffolk are not official jurisdictions like the City of Suffolk or Prince George County, but these are areas of concern under study in this assessment, therefore these areas should be treated as the same as those official jurisdictions, and the data for those communities needs to be presented and assessed. In addition, data for Windsor, Ivor, Waverly, and Wakefield needs to be provided in Tables 1-2, 1- 4, 1-5, and 1-8. Tables 1-5 and 1- 6 may cause confusion for some reviewers. It seems that the information contained in the two tables could be represented in one table rather than two. The demographic information for the state, counties, and portions of the counties located in the study area would be most beneficial when viewed together. The same can be said for Tables 1-8 and 1-9. The income data needs to all be displayed in one table.

In reviewing the data from both the Technical Report and the DEIS, it seems that there may exist the potential for disproportionate impacts upon minority and low-income communities in the study area. The percentages of minority populations in the study area significantly exceed the state average of 28% minority. The state benchmark is exceeded in Isle of Wight County, Prince George County, Southampton County, Surry County, Sussex County, the Towns of Wakefield and Waverly, and the City of Suffolk. This of course does not take into consideration the unincorporated areas of Disputanta, Zuni and Kings Fork. The data for low-income populations indicates that the percentages of residents living below the Poverty Level exceed the state average in Isle of Wight County, Southampton County, Surry County, Sussex County, the Towns of Wakefield and Waverly, and the City of Suffolk. The data however, does seem to suggest that further investigation and assessment may be required. It would be most helpful to see the overlays of minority and low-income populations in the study area. It would also be helpful to note areas of potential significant impacts (displacements, noise, air quality, etc.) along with overlays of the demographics.

In reviewing Table 4.5.3, it appears that there may indeed be a disproportionate number of minority displacements. Please note that the percentages of minority displacements for CBA1, CBA2, and CBA3 in both the Planning and Design Corridor scenarios equal or exceed the state average of minority population. In CBA2 under the Planning Corridor scenario the minority displacements exceeds 50%. This percentage of displacements is significantly higher than the percent of minority residents that lives in the study area (44%) according to the DEIS. The complicating factor seen here is that this area has a much higher percentage of minority residents than the state as a whole.

There is also a need to look at each of the communities individually, and to examine the nature and extent of those impacts as related to the individual community and its minority and low-income populations. Figures 3.5.1 and 3.5.2 seem to show areas with large numbers of minority and low-income residents concentrated in areas where there may be major construction activities. Situations such as this need to be examined carefully.

It needs to be noted that social, economic, environmental, and all other types of impacts that may potentially impact the community are a part of the arena of Environmental Justice. Therefore the Environmental Justice Assessment should look at the various potential environmental, economic, social, business, and any other types of impacts as they relate to or may impact the at-risk minority and low-income communities.

Through all of this, there is no mention of the unincorporated areas.

It is interesting that there seems to be a disconnect between the Social Consequences and Environmental Justice portions of the DEIS. The Social Consequences portion of the document does identify potential impacts on the minority and low-income communities, but the Environmental Justice portion indicates that there are none because they are seen as not being disproportionate. When examining the question of Environmental Justice, it needs to be understood that Environmental Justice is a complex concept that should be looking at a comprehensive view of the planning and project activities, that brings all of the stakeholders to the table in a meaningful way, looks carefully at the activities and planning in such a way as to assure the full protection of all, and in particular that makes a point of assuring that no group (and in particular those at greatest risk) is disproportionately impacted by the project or planning exercise. These objectives extend to the environmental, social, economic and cultural aspects of the project, look at the meaningful involvement and outreach to such communities, and extend to the distribution of and access to information. Environmental Justice is not something that is separate from the other portions of the investigation, but is an integral part of the investigation. Environmental justice should not be looked at as a special activity, but it is a part of the way that we do business on a daily basis.

There are 5 bullet items appearing on page 4-22 of the DEIS.

They are:

- The CBAs would provide offsetting economic and social benefits to the affected populations;
- Avoidance measures (Design Corridor) would be taken to reduce adverse impacts;
- Adverse impacts to minority and low-income populations would be proportional to impacts to the overall population;
- Minority and low-income populations have participated in and provided meaningful input throughout the transportation planning process; and
- Mitigation measures (see Section 4.5.6) would benefit minority and low-income populations as well as the overall population and continued outreach will identify measures to specifically benefit minority and low-income populations.

With respect to the bullets, there is a critical need for additional information that should be

included in the DEIS that would provide much needed detail and specific actions that will support the statements. For, example, how will the CBAs provide offsetting benefits to the affected populations?

There is a great deal of confusion regarding the Design Corridor/Planning Corridor scenarios. Please provide additional language to clarify these scenarios and how they will impact the communities.

The notion that minority and low-income populations would not be disproportionately impacted is questionable. As stated above, the state has a minority population of 27 percent, and we see scenarios with displacements running as high as 53 percent for Rt. 460. What is more, the document does not look at potential for impacts occurring in areas that are both minority and low-income. Concern also remains for the unincorporated areas that do not seem to be a part of the discussion.

Please provide specific examples of the work that has, is and will be done to assure the meaningful involvement of minority and low-income populations.

Provide the community involvement plan that is being used and demonstrates the measures that are in place to address the concerns and needs of minority and low-income populations.

Provide documentation to support the statement indicating that the mitigation measures would benefit both minority and low-income populations. It is also suggested that information related to the outreach to these communities be outlined in detail.